BELT AND SIDE IMPACT INFLATOR

ABSTRACT OF THE DISCLOSURE

The present invention provides an airbelt inflator (10) designed primarily for supplying and directing gas from the combustion of gas generant materials into a vehicle airbelt. Inflator (10) includes a substantially cylindrical inflator body (12), having a first end (11) and a second end (13). A unique booster cup (22) is positioned within inflator body (12), and is preferably press fit with initiator body (15), suspending cup (22) within inflator body (12). Cup (22) facilitates consistent burn of the main propellant, imparting repeatable bag performance. A cylindrical mesh filter (38) is positioned in inflator body (12). A nozzle (36) is preferably positioned adjacent a disc (30). A variety of different nozzles giving inflator (10) varying gas output characteristics can be utilized with inflator (10), for example thrusting inflators or thrust-neutral inflators, depending on the operating requirements of the airbelt system. Booster cup (22) is sized such that it extends into inflator body (12), and abuts filter (38), thereby serving as a stand off or locator for filter (38), and providing a relatively snug packing arrangement for propellant tablets (28).